



## Third Quarter 2018 Activities Report

### HIGHLIGHTS

- September Quarter affected by significant gold loss to tailings and severe equipment breakdowns underground in August and September.
- Completed the third party CIL tests on 8.94t of Mestre ore and 22.11t of tailings returning an average grade of 28.75 g/t and 6.143 g/t Au with recoveries of 98.81% and 93.11% respectively.
- The same apples to apples test through our own Hammer Mill 3 and Gekko circuit yielded grades only 8.75 g/t and 2.1 g/t respectively.
- Decision not to install Hammer Mill 4 post the completion of the CIL tests and focus instead on optimizing the current Hammer Mill 3 and Gekko circuit performed by Gell Street Mining.
- Completed 13-hole Antena drilling programme and drilled 9 holes so far at Rio do Ouro (formerly Sertão). Drilling at Rio do Ouro is now on hold until Cascavel achieves its first production milestone.
- Completed *High Grade panel samples at Cascavel's Mestre Level 6 grading up to 1,443 g/t Au* reported on 3<sup>rd</sup> September 2018 with best assays including 993.2 g/t, 1204.0 g/t, 1291.7 g/t, 1,442.6 g/t and 1,999.9 g/t.
- Better understanding of the potential of the much thicker Intermediate zone as reported on the 16<sup>th</sup> of July 2018 in *Geological Modelling of Cascavel Mineralisation*.

### KEY OBJECTIVES FOR DECEMBER 2018 QUARTER

- Focus on increasing daily milling from 1 to 2 shifts effective October 29<sup>th</sup> 2018.
- Process up to 3,000t per month of high-grade low cost tailings through our gravity circuit (Hammer Mill 3 & the Gekko circuit) post the optimization work carried out by Gell Street Mining.
- Target to improve gravity recoveries to 75-80%.
- Consideration to invest in a regrind ball mill and flash floatation circuit to increase recoveries to 90-95% for a capital investment of A\$200,000-\$300,000 before year end.
- Complete a 6 hole underground drilling programme at Cascavel.
- Aim for first production milestone of 1,000 ounces per month to be achieved near term.

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#### ASX Code

**OGX**  
(Ordinary Shares)  
**OGXOD**  
(Listed Options)

#### Issued Capital

1,051,311,211 Ordinary Shares  
225,072,116 Listed Options  
64,640,687 Unlisted Options  
127,000,000 Performance Rights  
1,197,540 Tranche A Convertible  
Notes

## EXECUTIVE SUMMARY

Orinoco Gold Limited (ASX: OGX) (**Orinoco** or the **Company**) had a frustrating third quarter at its Mineração Curral de Pedra (MCP) project as it maintained its 'Back to Basics' strategy. As we gain greater understanding of our minerology it appears our gravity mill has been losing significant amounts of gold into the tailings. As reported in our report dated 31<sup>st</sup> October 2018 *CIL Tests confirm outstanding high-grade results for tailings and Mestre zone* we believe the gravity mill has not been properly configured or optimised which has resulted in ongoing loss of gold to tailings. As an apples to apples comparison, when we sent 8.94t of Mestre ore to a third party ball mill and CIL we recovered 28.75 g/t and a recovery of 98.81%. However, testing another similar 10t of Mestre ore through our own gravity mill we achieved an average grade of only 8.57 g/t. To help rectify this problem, we appointed Gell Street Mining to come to site in the last 2 weeks. During their visit, the gravity mill was optimised with particular focus on the IPJ – Inline Pressure Jig plus various small 'tune up' adjustments focused on recovering the fine gold component of our high grade tailings and ores. Our gravity only mill has a long history of losing gold to tailings. In the same report mentioned above we reported that 300 historical unpublished tailing results between July 2016 and March 2017 were as high as 514 g/t with an average grade of 13.2 g/t.

We hope the work that Gell Street Mining performed will result in an improvement in our gold recoveries. Effective Monday 29<sup>th</sup> of October, we have moved from one shift to two shifts. There will be a particular focus on processing up to 3,000 tonnes of tailings each month in addition to our high-grade ores. Our tailings sit next to our gravity mill and could be a low-cost option to produce ounces given their potential high grade nature.

During the quarter, MCP also suffered from numerous underground machinery breakdowns that led to considerable downtime of key machinery in August and September. All non-stock items have subsequently been purchased and we are trying to improve our spare part availability. The third LHD has been ordered and is scheduled for delivery on the 8<sup>th</sup> of November 2018. The permanent Powder magazines have been constructed to the highest standards.

We hope that this stretch of disappointing production results this year is coming to an end. When Gell Street Mining came to site over the last 2 weeks, we purposely closed the gravity circuit to allow a complete inspection. The third party CIL results reported in *CIL Tests confirm outstanding high-grade results for tailings and Mestre zone* were dramatically different to the recovered gold we achieved through our own gravity mill. This difference is further backed up by the 300 individual tailing results analysed by Metago and ALS between the 18<sup>th</sup> of July 2016 and the 22<sup>nd</sup> of March 2017 which have never been published before showed tailings as high as 514 g/t at an average of 13.3 g/t. This may be a nugget effect but the number of these high-grade results is interesting and may help to explain why our randomly taken CIL test returned a result of 6.143 g/t Au from the first test.

The results are also in line with our earlier announced 5 x 1 tonne random samples taken from Tailings 1 and reported in *'Orinoco Confirms Outstanding Grades of Gold in Tailings'* on date 31 January 2018 through our Hammer Mill 2 that averaged 4.75 g/t, 9.72 g/t, 9.86 g/t, 10.14 g/t and 11.90 g/t and is further confirmation that our tailings are extremely high grade and a key focus for our mill now that it has been re-optimised. Our decision not to install Hammer Mill 4 when we first announced it, is now in hindsight the correct one.

As stated in our Q2 report exploration remained a key dual focus for the company. Exploration at Antena – Xupe, Rio Do Ouro, Tinteiro, Rio do Ouro SW extension and Digo Digo targets was well advanced during the quarter. Diamond drilling at both Rio Do Ouro (new name for Sertão) and Antena Xupe was completed. 304 soil samples were collected at our Tinteiro target and 500 soil samples were collected at Rio do Ouro SW extension. This was to test an identified anomalous gold zone.

All documentation has been compiled for the environmental impact assessment (EIA) for the reopening of Rio de Ouro (previously named Sertão). Stages 1-4 and 5 were mined by Troy Resources between 2002-2006 and produced 256,000 ounces (189,500 ounces Stages 1-4 and 54,200 ounces in Stage 5 at an average grade of 25 g/t - some 15 times the industry average for open pit operations. Sertão has an existing JORC Mineral Resource estimate 223,111 tonnes at 6.9g/t for 49,268 ounces of contained gold as reported on the 13<sup>th</sup> of June 2017 in the report entitled *Orinoco Announces Maiden High-Grade JORC Mineral Resource for Sertão Gold Deposit*,

*Brazil.* A new underground drilling program has been designed for Cascavel and it is anticipated to commence drilling in Q4.

## HEALTH AND SAFETY

During the quarter the health and safety team continued with ongoing training of employees . Unfortunately, there were two registered injuries; both resulting in lost time injuries (LTI) through a sprained ankles and back strain. Health and safety are extremely important for the company as we strive towards our Zero accident policy. External safety consultant engineers inspected the mine and our exploration sites and were happy with the overall safety performance at the mine.

We are proud of the excellent training for all employees and are proud of our working ethics. Greater interaction between Managers/Supervisors and the workforce has contributed to the safer working environment.

## ENVIRONMENTAL

All permits and licenses are up to date and the Company is in full compliance with its ongoing requirements. New settling tanks for the mine water discharge have been excavated and commissioned. All documentation has been compiled for the environmental impact assessment (EIA) for the reopening of Rio de Ouro (previously named Sertão).

## CASCAVEL GOLD MINE, Brazil (Orinoco: 100%)

- Total Development for the quarter was 357m
- Total Ore mined 4,288 tonnes.
- Total Ore processed through the gravity plant 5,016 tonnes.
- Average plant throughput 15.43 tph.
- Hammer mill 3 in production.
- New LHD ordered
- Permanent powder magazine construction completed.
- During the quarter 316.80 ounces were produced at an average recovered grade of 1.9g/T.

Cascavel Gold Mine 2018 Development Summary					
Type		Q1	Q2	Q3	Q4
Decline Shaft Development	m	-	-	-	-
Decline Development	m	72	50	45	-
Lateral Development	m	274	265	312	-
Incline Development	m	-	-	-	-
<b>Total Development</b>	<b>m</b>	<b>347</b>	<b>315</b>	<b>357</b>	<b>-</b>

<b>Stopes</b>	<b>Ton</b>	<b>487.5</b>	<b>878.3</b>	<b>1,508</b>	<b>-</b>
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Non-availability of underground machinery caused considerable problems with the mucking out of the mined fronts, notwithstanding this the mine made good progress with its development advances.



Advance for the year 2018

## Mine Development

Development areas for the quarter included:

- **Mestre N6N,**
- **Mestre N6S,**
- **Mestre level 5,**
- **Central level 7,**
- **Cascavel and Mestre slot raises and Stopes.**

A total decline and lateral advance of 357m was achieved for the September quarter. Development was hindered by underground machinery breakdowns. The new pumping station reported in the Q2 report has been completed and commissioned.

The decline shaft extension has commenced and is anticipated to be completed during the second half of Q4, allowing faster haulage of ore to the surface and better ventilation as the mine develops deeper.

Our Geotechnical engineer has overseen all remedial work and rock support installations. A faulty batch of split sets was delivered which set back the development works by 3 days.

Short and medium term mine planning is underway and an underground diamond drilling program has been designed. This will be used to create block models and define the continuity of structures; the drilling program is currently being costed and assessed by various contractors. The program has been designed so that all drilling will be carried out from underground thus economizing on the cost of meters drilled.

The new stopes which are some twenty-six meters in length (which is the maximum possible with the known plunge) are being extracted by means of split blasting, owing to the geometry of the narrow veins. This process is a little slower than conventional stope mining but reduces the dilution. New stopes have been designed between levels at 26m centers in line with the plunging orebody.

## Process Plant

The hammer mill grind has proven to be a great improvement on the previously installed circuit.

The plant processed a total of 5,016 tonnes and ran for a total of 325 hours during the quarter.

With the fine tuning recently made after the September quarter to the Gekko plant and changes in the mineralization we now believe that the gravity circuit is performing to its maximum.

Owing to an amount of gold bearing sulphides in the ore from the lower Mestre zones we continue further analysis of the ores and concentrates to confirm the optimum extraction.

A bulk sample consisting of 8.94 tons of ROM ore taken from Mestre levels 6 & 7 was sent for cyanide testing at a third-party plant.

A further bulk sample of 22.11 tons of tailings originally processed in 2016 was sent to the same Third party for processing.

The site laboratory is performing to expectations. Further bottles were purchased during Q3 which will have allowed us to double the number of samples for internal processing control.

## Exploration

### ANTENA-XUPÉ:

- **Excellent results achieved from the maiden drilling campaign at Antena – Xupé prospect confirmed 300m down plunge extension to the historic Xupé mine and 200m down-plunge extension to Antena View mine, with good thickness and grade.**
- **Highlights from the 2,068 metre campaign included:**
  - ANT\_004 (Xupé): 21.7m @ 4.49g/t Au (from 144m) inc 10.2m @ 7.74g/t Au (from 155.5m)
  - ANT\_005 (Antena View): 0.77m @ 5.61g/t Au (from 67.75m)
  - ANT\_007 (Xupé): 4.2m @ 5.66g/t Au (from 172.5m) inc 1m @ 8.75g/t Au (from 173m)
  - ANT\_008 (Xupé): 0.5m @ 6.48g/t Au (from 160m) and 0.5m @ 9.78g/t Au (from 184.5m)
  - ANT\_010 (Xupé): 8m @ 4.02g/t Au (from 119.5m) inc 0.88m @ 8.1g/t Au (from 121.5m)
  - ANT\_011 (Xupé): 3m @ 4.24g/t Au (from 140m) inc 1.15m @ 6.42g/t Au (140.5m)
  - ANT\_012 (Xupé): 5m @ 3.93 g/t Au (from 97m) inc 0.5m @ 13.15g/t Au (from 97m)
- **The results compliment historically reported unmined holes by Troy Resources including:**
  - GVC317 (Xupé): 6m @ 29.3g/t Au (from 21m) inc 1m @ 164.33g/t Au (from 24m)
  - GVC403 (Xupé): 9m @ 7.61g/t Au (from 62m)
  - GVC332 (Xupé): 4m @ 3.45g/t Au (from 45m)
- **A Phase 2 A\$300,000 campaign at Antena West will commence for near surface targets in quarter 4 2018.**

As announced on 1<sup>st</sup> May 2018, ANT\_004 identified significant extension of Troy's Xupé pit to the west with 21.7m @ 4.89g/t Au (144- 165.7m) including 10.2m @7.74g/t Au (155.5 – 165.7m) including 2m @ 10.82g/t Au (158 – 160m) including 1.5m @ 11.36g/t Au (162 – 163.5m).

ANT\_007 and ANT\_008 successfully confirmed further down plunge extension to the west from ANT004 and ANT\_010 to ANT\_012 confirmed the continuation of the mineralised zone north and south of ANT\_004 and defined the entire width of the ore shoot to be approximately 80m. Independent laboratory results from ALS confirm the presence of a significant mineralised extension to the Xupé mine of approximately 300m down plunge which remains open to the west. Detailed resource modelling of the extension to the Xupé orebody is underway.

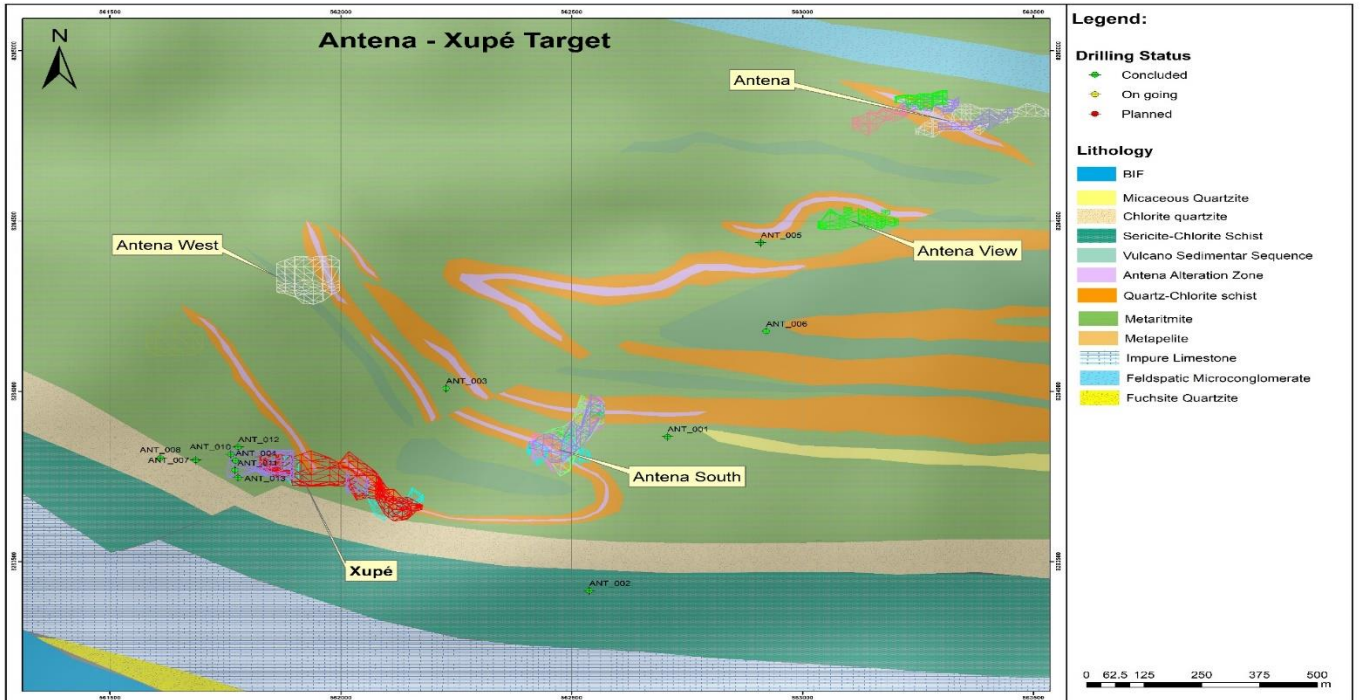


Figure 1: Antena-Xupé target geology

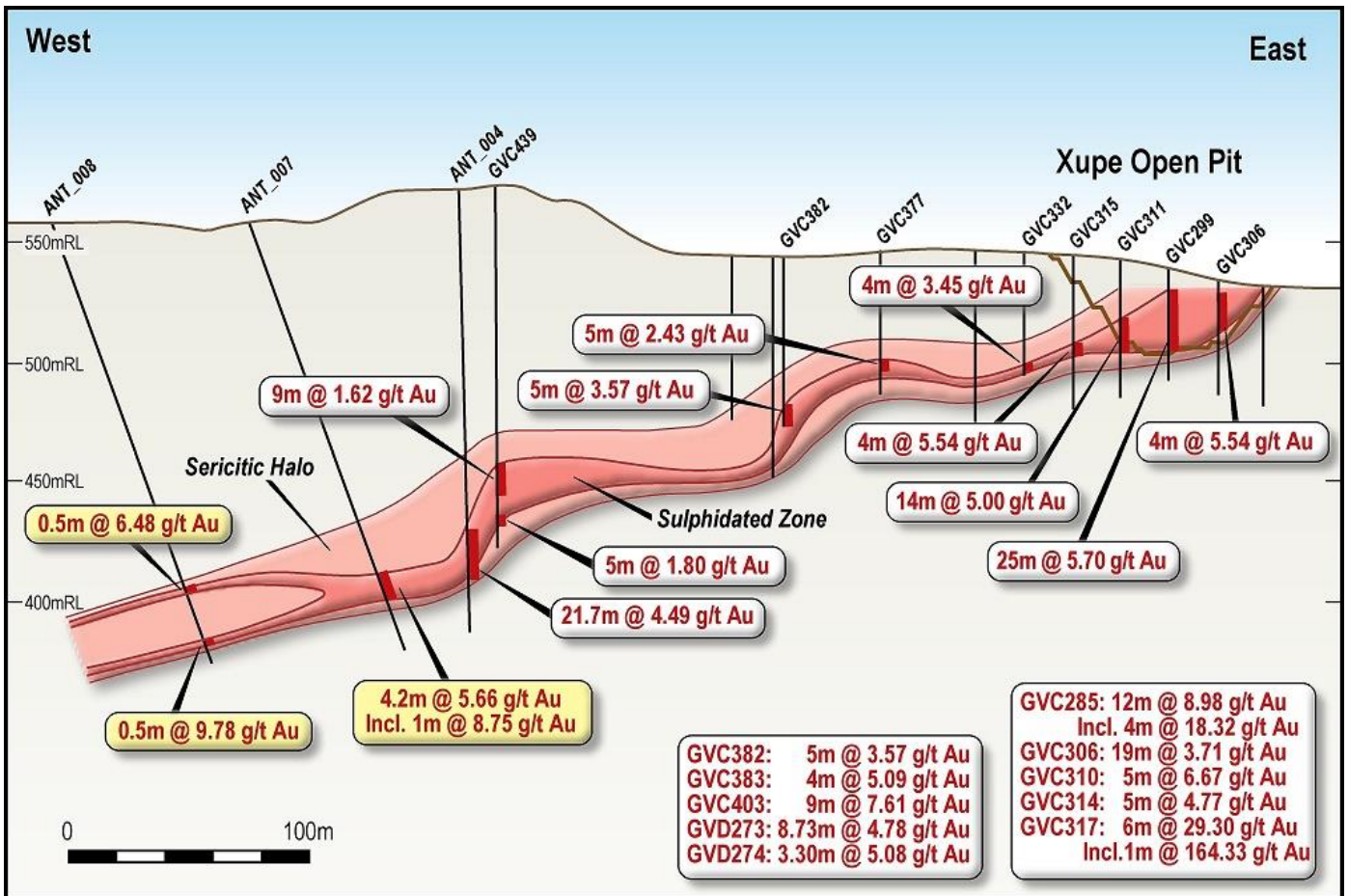


Figure 2: Antena-Xupé cross section including historical holes completed by Troy Resources highlighted in the box and detailed below in historical quarterly results published by Troy.

Figure 1 illustrates the 13 hole programme ANT\_001 to ANT\_013 at Antena Xupé. A Phase 2 programme is scheduled to begin in Quarter 4 2018 at Antena West where nearer surface mineralisation will be targeted based on historical holes already completed by Troy Resources.

Our Phase 1 programme was initially chosen by our previous Exploration team earlier this year. Along the way drilling programme changed for the final 9 holes after a more thorough review of the historical announcements by Troy Resources. This review came after 3 (ANT\_001 to ANT\_003) of our first 4 holes missed mineralization in the programme which we announced on the 1st of May 2018 entitled Diamond drilling results 21.7m @ 4.49 g/t at Antena-Xupé. Since re-designing our drilling programme we are happy that nearly every hole since hit mineralization (ANT\_013 results still pending). Our Phase 2 programme will target Antena West which we believe is a significant target in itself.

For historical reference, Troy Resources first highlighted the potential of Antena-Xupé in their 2nd Quarterly report on the 31st of January 2005. At the time they wrote 'A new and potentially significant prospect, called Xupe was discovered approximately 400 metres south east of the Antena Sul mineralisation. Highly encouraging intersections including 21m @ 4.17g/t au from 3m, 10m @5.47g/t au from 23m and 2m @ 6.40g/t au from 1m were obtained from first pass drilling. Currently, drilling is targeting a 140m long mineralised zone that remains open both to the north west and to the south east.' Most of this near surface mineralization has since been mined out but significant amounts still remain. These results announced by Troy are the kind we hope to find at Antena West when our drilling programme turns to near surface mineralization targets. One of the keys to restarting the Antena Cluster during a Phase 1 low capex startup will be to continue to find near surface mineralisation that would then allow us to truck ore to Sertao (renamed to Rio Do Ouro) once we have completed licensing and drilling at Rio Do Ouro. So far results at Rio Do Ouro are very encouraging with another 8 holes planned.

#### **RIO DO OURO:**

Assay results for OST012 indicated a significant high-grade extension to the Sertão Stage 4 orebody (now called Rio do Ouro) to the west of the previously mined Stage 4 open-cut pit. OST012 assays were requested to be processed as a high priority to allow the assays to be analysed with OST001 to confirm the priorities for the ongoing drilling program to the west of Sertão Stages 4 and 5.

Examination of current and historic drill core indicate the presence of a fault running south-south-west to north-north-east along the western edge of the old Sertão mine. It is assessed that the fault in this area has resulted in the dislocation of the high-grade ore shoots by approximately 25m and has previously caused difficulty in proving continuation of the high grade mineralization to the west of the Sertão Mine.

Drilling was undertaken to test the eastern extension to the old Sertão Stage 5 ore body with two shallow programmed Diamond Drill Holes (OST013 and OST014). Historic drilling had tested for extension of the Sertão Stage 5 orebody directly to the east of the previously mined section of the old Sertão Stage 5 pit, however; no allowance was made for potential offsetting of the orebody due to additional faults in this area. Core samples of OST013 and OST014 were sent for assay.

#### **SOIL SAMPLING:**

##### **SUMMARY**

- **304** soil samples were collected at Tinteiro target to test important gold/cobalt-rich zone;
- **500** soil samples were collected at Rio do Ouro SW extension target to test anomalous gold zone previously identified.

#### **GEOCHEMISTRY**

- **1014** core samples sent to ALS-Lab Goiânia, including standard and blank (QA/QC samples);
- **842** soil samples sent to ALS-Lab Goiânia, including QA/QC samples.

## ASX Announcements made during 3<sup>rd</sup> Quarter 2018

28/09/2018	Appendix 3B - Issue of Ordinary Shares (Conversion)
27/09/2018	Appendix 3Y - Change of Director's Interest Notice
20/09/2018	Issue of Performance Rights and Unlisted Options
18/09/2018	Notice under ASX Listing Rule 3.10A
13/09/2018	June 2018 Half Yearly Report and Accounts
13/09/2018	Appendix 3B - Issue of Ordinary Shares (Conversion)
12/09/2018	Prospectus
11/09/2018	Issue of Tranche A of Convertible Notes and Appendix 3B
03/09/2018	Appendix 3B - Issue of Ordinary Shares to MEF I, L.P.
03/09/2018	High Grade Panel Samples at Cascavel's Mestre Level 6
31/08/2018	FUNDING OF UP TO A\$8M SECURED VIA CONVERTIBLE NOTE ISSUE
24/08/2018	Completion of maiden Antena-Xupe Diamond Drilling Campaign
24/08/2018	Supplementary Information - Drill Hole OST012 Rio do Ouro
17/08/2018	Rio do Ouro (new name for Sertao) Drilling Update
14/08/2018	Digo Digo Exploration
06/08/2018	Sertao Drilling Update
06/08/2018	Resumption In Trading
31/07/2018	Quarterly Cashflow Report - June 2018
31/07/2018	Quarterly Activities Report - June 2018
25/07/2018	DRILLING COMMENCES AT SERTAO FOLLOWING DATA REVIEW
16/07/2018	Geological Modelling of Cascavel Mineralisation
04/07/2018	Change of Director's Interest Notice - Appendix 3Y

## CORPORATE

### Capital Raising

As announced on 31 August 2018 the company entered into a Convertible Note Agreement with MEF I, L.P. (**Magna**) under which the Company may receive up to \$8,000,000 in four equal tranches of \$2,000,000 within a 12-month period at the Company's discretion (**Convertible Note Agreement**). A summary of the terms of the Convertible Note Agreement is set out in the announcement "*FUNDING OF UP TO A\$8M SECURED VIA CONVERTIBLE NOTE ISSUE*" issued on 31 August 2018.

Pursuant to the Convertible Note Agreement, the Company drew down the initial tranche on 11 September 2018 and paid the initial Commitment Fee in Shares. During the quarter Magna converted 100,000 notes on 13 September 2018 and a further 100,000 notes on 26 September 2018.

### Capital Structure

At the date of this report Company has:

- 1,051,311,211 Fully Paid Ordinary Shares on issue;
- 225,082,116 OGXOD listed Options exercisable at \$0.11 on or before 31 January 2020; and
- 64,940,687 unlisted options exercisable at various dates and prices.
- 127,000,000 Performance Rights with various milestones
- 1,197,540 Tranche A Convertible Notes.



-ENDS-

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**Competent Person Statement:**

*The information in this announcement that relates to Exploration Results and geology is based on information compiled by Thiago Vaz Andrade who is a member of the Australasian Institute of Mining and Metallurgy. Thiago Vaz Andrade is an employee of Orinoco Gold Limited and has sufficient experience, which is relevant to the style of mineralization under consideration and to the activity that they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thiago Vaz Andrade consents to the inclusion in this announcement of the matters based on the information in the form and context in which it appears.*

*The information in this release that relates to the Exploration Target has been compiled by Mr. Richard Buerger (BSc.). Mr Buerger is a full-time employee of Mining Plus Pty Ltd and has acted as independent consultant on the Exploration Target estimation. Mr. Buerger is a Member of the Australian Institute of Geologists and has sufficient experience with the style of mineralisation, and deposit type under consideration and to the activities undertaken to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Resources (The JORC Code)". Mr. Buerger consents to the inclusion in this report of the contained technical information relating to the Exploration Target estimation in the form and context in which it appears.*

**Forward-Looking Statements:**

*This Announcement includes "forward-looking statements" as that term within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond Orinoco Gold Limited's control. These forward-looking statements include, but are not limited to, all statements other than statements of historical facts contained in this presentation, including, without limitation, those regarding Orinoco Gold Limited's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause Orinoco Gold Limited's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). These factors include, but are not limited to, the failure to complete and commission the mine facilities, processing plant and related infrastructure in the time frame and within estimated costs currently planned; variations in global demand and price for gold materials; fluctuations in exchange rates between the U.S. Dollar, the Brazilian Real and the Australian dollar; the failure of Orinoco Gold Limited's suppliers, service providers and partners to fulfil their obligations under construction, supply and other agreements; unforeseen geological, physical or meteorological conditions, natural disasters or cyclones; changes in the regulatory environment, industrial disputes, labour shortages, political and other factors; the inability to obtain additional financing, if required, on commercially suitable terms; and global and regional economic conditions. Readers are cautioned not to place undue reliance on forward-looking statements. The information concerning possible production in this announcement is not intended to be a forecast. They are internally generated goals set by the board of directors of Orinoco Gold Limited. The ability of the company to achieve any targets will be largely determined by the company's ability to secure adequate funding, implement mining plans and resolve logistical issues associated with mining. Although Orinoco Gold Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.*